

Report Documentation Page			Form Approved OMB No. 0704-0188	
<p>Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p>				
1. REPORT DATE OCT 1993	2. REPORT TYPE	3. DATES COVERED 00-00-1993 to 00-00-1993		
4. TITLE AND SUBTITLE The Icarus Syndrome: Air Power Theory and the Evolution of the Air Force			5a. CONTRACT NUMBER	
			5b. GRANT NUMBER	
			5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)			5d. PROJECT NUMBER	
			5e. TASK NUMBER	
			5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Rand Corporation, Project Air Force, 1776 Main Street, PO Box 2138, Santa Monica, CA, 90407-2138			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)	
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited				
13. SUPPLEMENTARY NOTES				
14. ABSTRACT				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 2
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	19a. NAME OF RESPONSIBLE PERSON	

OCTOBER 1993

The Icarus Syndrome Air Power Theory and the Evolution of the Air Force

Over the past decade, many in the Air Force have expressed concern about the health of their institution. They question whether the Air Force has lost its sense of direction, its confidence, its values, even its future. Among the troubling tendencies they find are weak ties between Air Force people and their institution, and a narrow focus on systems and commands rather than missions and strategies. For some, the growing expression of such concerns reflects nothing more than the maturation of the most youthful of America's military institutions. For others, it suggests a crisis of spirit that threatens the hard-won independence of the Air Force.

A recent RAND study, *The Icarus Syndrome* by Carl H. Builder, points to the abandonment of air power theory in the late 1950s to the early 1960s as the key to understanding the current institutional problems of the Air Force. This study argues that the Air Force, as an institution, rose and then fell on the wings of air power theory—rising when it adhered to the theory but falling when it later abandoned the theory in favor of a devotion to vehicles. The diagnosis is followed by a provocative prescription for the Air Force if it hopes to regain its institutional health.

Origins of Air Power Theory

Air power theory, developed between the world wars, is the idea that air power can be decisive in warfare by striking at the heart of the enemy through the third dimension. The concept appealed to military airmen because of the importance it lent them and their beloved machines. It was also embraced by many statesmen and politicians and by the public because it offered a hope of winning wars quickly and cheaply and, above all, avoiding the carnage of stalemated trench warfare that was such a traumatic aspect of World War I. With that conjunction of interests, air power theory was effectively used by military airmen in Britain and America to build up their national air forces and ultimately wrest their freedom from army ground commanders.

During World War II, air power played a significant role by striking at the heart of the enemy but, for the most part, it did so neither as quickly nor as decisively as predicted by air power theory. Furthermore, some Air Force elements, notably fighter and air transport commands, drifted from air power theory because the actual demands of warfare involved them

in supporting the needs of Army ground troops. As the hostilities came to a close, it was evident that air power theory, as it had been articulated before the war, was open to scrutiny and to challenge. It was only the advent of the atomic bomb that seemed to remove any doubt about air power's ability to be decisive by striking at the heart of the enemy through the third dimension. Thus, even though the experience of the war had failed to provide sufficient proof for the original air power theory, its validity was still widely accepted under the terms of the Cold War stalemate. What mattered, finally, was not whether the theory was flawless but that it set forth a clear direction and attracted strong support. Before the war, it had helped build up British and American air forces; after the war, it allowed the U.S. Air Force to construct the most formidable and destructive military force the world has ever known.

From Air Power Theory to Deterrence

However, at the same time that the mighty Strategic Air Command (SAC) was being forged, air power theory was quietly transformed into deterrence theory. No longer argued as a way of winning wars quickly without massive battlefield carnage, air power was now presented as the key to national survival in the nuclear age. Since the manned bomber was the sole means of delivering nuclear weapons, the Air Force embraced deterrence and used it to gain primacy in the competition for defense budgets. Yet despite the fact that it initially led to important gains, this new version of air power theory was interpreted by the Air Force in a way that was not comprehensive enough about either the ends or means of air power to help the institution adapt itself effectively during a period of rapidly expanding resources and opportunities. No longer guided by a comprehensive air power theory, the Air Force started to fractionate soon after reaching its institutional heights.

An Air Force of Factions

By the late 1960s, the advent of the ballistic missile and the experience of the war in Vietnam had left the Air Force with a diversity of means and ends far beyond those originally conceived by military aviators. The end, rather than striking at the heart of the enemy, became striking at the enemy

anywhere. The means came to include not just strategic bombers but tactical fighters as well as military air transport, missile, and space systems. In making room for all of this diversity, the Air Force was transformed into a set of factions, each favoring certain vehicles and devoted to acquiring follow-up models. Its members, not guided by a comprehensive theory or focused on a single mission, were free to commit themselves to their favorite technologies, careers, or commanders. Dedication to the profession of arms—distinguished from other professions by its absolute commitment to mission, even at the cost of life itself—was an inevitable victim.

The Need for a Unifying Mission, Vision, and Theory

The prescription provided in the study centers on mission. To remedy the fundamental problems of the Air Force, its leadership needs to reestablish a unifying institutional mission that is worthy of commitment. If the Air Force can establish a compelling mission to serve as a compass for all of its components, commands, and people, it will have a base for building an institutional vision of what the organization can and ought to be about. As a first step in this process, the Air Force must articulate a theory of air power—an effective explanation of how air power works and why it is important to those who support it. The original versions of air power theory, useful in their day, need to be recast into a new version that can encompass the modern Air Force with its varied components and multiple roles. Most important, this new version of air power theory must be based upon a coherent view of the future, a sense of how the world is likely to work, and on related notions about the security environment with which the United States military will have to cope.

The Roots of Theory

The study provides explicit examples of the kind of conceptual foundation that must be laid if air power is to be constructively redefined. It depicts, as one likely scenario of the future, a world in which the power of geographically defined nation-states increasingly diffuses to individuals, factions, corporations, and other non-state actors. As a consequence of this shift, violence organized by nation-states may decline, but factional violence of all kinds may increase. These conflicts will not be fought with regular forces or

traditional means; they will have the character of civil wars, insurrections, and riots. In such a security environment, the traditional roles of air power will not disappear, but missions involving the rapid projection of infrastructures—transport, communications, surveillance, rescue, humanitarian assistance, civil emergency, and security—are likely to increase disproportionately.

Prescriptions

Given such a disorderly world and such needs for projecting infrastructure as well as force, the study proposes a new theory of air and space power:

In the emerging, less controllable world of global commerce and borderless nations, the military medium of dominance and, hence, the choice of power elites will be the aerospace continuum because of its universal, rapid access and unique vantage point. Hence, the control and exploitation of that medium, more than any other, will offer the widest range of military options and the highest degree of military power.

The step from the proposed theory to an institutional mission statement is clear and direct: "The mission of the Air Force is the military control and exploitation of the aerospace continuum in support of the national interests." The statement not only articulates an inclusive mission centered on national service, it also provides the essential elements of an organizational vision: a unique sense of identity and a shared sense of purpose. From the perspective gained by reestablishing a theory and a mission, the Air Force can see itself as "America's only military service exclusively devoted to military operations in the aerospace environment and . . . therefore, dedicated to providing unsurpassed capabilities for the nation to pursue its interests through the military control and exploitation of the aerospace continuum."

The study concludes with a reminder that a theory of air power is like most theories in that it does not have to be precisely correct to be of great value in motivating and giving direction to productive human enterprises. The original air power theory was not completely correct or enduring, but it made a powerful and essential contribution both to the rise of the Air Force and to the vital interests of the nation.

The Icarus Syndrome: The Role of Air Power Theory in the Evolution and Fate of the U.S. Air Force by Carl H. Builder was prepared at the request of the Commander of the Air University and sponsored by RAND's Project AIR FORCE. The book will be published in December 1993 by Transaction Publishers (Rutgers University) of New Brunswick, New Jersey, and includes a foreword by Merrill A. McPeak. To order the book, please call Transaction Publishers at 908-932-2280. RAND is a nonprofit institution that seeks to improve public policy through research and analysis.

RAND

1700 Main Street, P.O. Box 2138, Santa Monica, California 90407-2138 • Telephone 310-393-0411 • FAX 310-393-4818
2100 M St., N.W., Washington, D.C. 20037-1270 • Telephone 202-296-5000 • FAX 202-296-7960